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Agricultural.

NOTES BY THE WAY.

A Visit to Northville—The Farm and Flock of Mr. C. M. Thornton—A Fine Sheep Country.

The fine weather of Thursday last was taken advantage of to run out to Northville and look over the flock of Merinos of Mr. C. M. Thornton, Secretary of the Wool-Growers' Association of this section. The day was a beautiful one for the season, and the warm sun, succeeding the heavy rains earlier in the week, was driving the frost out of the ground in a hurry. It looked as if spring had come to stay, and come earlier than usual. At Northville, which is fast becoming a thriving business place, we left the F. & P. M. cars, and started for the Thornton farm. It is about two miles straight up the railway, and in a fine rolling country whose green hills and small streams peculiarly adapt it to the requirements of the great American Merino. Foul or foot-rot should be unknown here, and the splendid blue grass sod to be seen in the pastures, gave promise of the choicest pasture for grazing stock. The heavy rains had swollen the streams and they were all bank full.

We found Mr. Thornton among his sheep (where you will always find a sheep man) with Mr. Bradley, a neighbor and a sheep man also. He had his yard well littered down with straw, and upon it some twenty or thirty lambs were enjoying the warm sunshine. His sheep barn is situated upon a low hill, and the yard has a south-eastern exposure, which appeared to just suit the lambs. Mr. Thornton says he has had good luck with his lambs this season, and he certainly had some very promising ones. After looking at the lambs and handling a few of the ewes, the party had a look at some bucks, yearling and two year olds, some thoroughbreds and some grades, and then went to the barn to see the ram now at the head of this flock. He is known as J. Crane No. 31, and is a fair animal, his lambs showing a fine staple and being well covered. Near him we found a yearling ram which our readers have heard of before. He was a year old last Friday, and weighed that day 144 lbs. (in this case figures do not lie). He is a half brother to Short's Diamond, being by A. A. Wood's Sheldon ram, the sire of Diamond, and from a Myrick ewe. He is a large sheep but very close to the ground, with a back and loin that would do credit to a Shorthorn. He is very deep through the body, and has room for any amount of lungs. He carries a fleece of good quality and crimp, carrying a fair amount of oil, well distributed. He is a plain-bodied sheep, but his fleece is of fair density and long stapled. His flanks are well folded, and in front he shows remarkably well, the folds being large and the wool of even quality all over. His head is broad, short and well capped, and he is well covered down to the toes. It is Mr. Thornton's intention to shear this ram at Lansing, and while he may not shear as big a fleece as some others there, he will, we believe, give as much clean wool as any ram of the same age.

Mr. Thornton has had a flock of grade sheep for a number of years, on which he had the best rams he could get. Some time ago, however, he started into thoroughbreds, by the purchase of three ewes from A. A. Wood of Saline; two of which were Myrick ewes. No. 57 and 51 and one from the flock of J. S. Dudley & Son. Two others, L. H. Payne 126 and L. S. W. Jr. 57, bred in Vermont, were afterwards purchased. No other ewes have been purchased, the others in the flock being bred on the farm. The rams used have been A. A. Wood's Sheldon ram, and the young ewes are by him. He has also used Bamber's Pony, in which he had a half interest, Shoreham 332, bred in Vermont. He has some good grade sheep, on which he has used rams from the Philo Rich flock, a two-year-old ram bred on the place from

Wood's Sheldon ram, and the Crane ram. It is Mr. Thornton's intention to close out his grade stock as soon as possible, and confine his attention to thoroughbreds.

During the day some of the neighboring farmers dropped in, among them Mr. Sessions, Mr. Bradley and others. They were all interested in sheep, having fine grade flocks which they have improved until they shear an average of 11 to 18 lbs. per head. Each one of them was very certain that the coming shearing at Northville will not be the poorest one in the State. We intend being there to see on the 24th inst., the date upon which it is to be held.

RECLAIMING SWAMP LAND.

ALBION, March 10, '84.

To the Editor of the Michigan Farmer.

I would like to have you answer the following questions through the FARMER: Is there any grass that will make good hay and pasture on marsh, where the marsh is from five feet in depth, with a soil of blue clay? Said marsh has been in times long past a tamarack swamp, as you can still find an old log under the surface about two feet? Can the soil be broken enough with the "Acme" I have heard that they do so on their swales out west. That would save plowing, and it would take some time for the sod to form again.

The marsh is drained enough so that it can be mowed with a team. The grasses that now grow on it are blue joint, sickle grass, wild timothy and common marsh grass. Brakes are very thick in places, with some weeds and willows. It can now be used for pasture, and makes fair hay. Will it pay better to let it alone, or try to make it better? Some marshes where the muck is deep, I have heard before utterly worthless by draining, dredging, breaking by fireweeds, and where attempts are made to raise grain, it either dries and withers, or is drowned out, according to the season.

If there is any kind of grass that will succeed in such soils, please state where it can be obtained, cost and time to sow it. If you can give any information, do so, and oblige.

A SUBSCRIBER.

But very few farmers in the State have had such an experience as will justify them in giving advice, that if followed will be the wisest course to pursue. The above letter has been submitted to C. B. Charles of Bangor, Mich., a graduate of the Agricultural College, who with his uncle, Wm. Charles, is engaged in clearing several hundred acres of similar swamp land as this subscriber wishes to reclaim. They have ship each year a large amount of hay cut from such land.

Mr. Charles says: "Our swamp is quite similar to the one described, and when we can we burn the wild grasses in the spring, then plow about June first. The after cultivation varies. We plant potatoes on all we have seed for, sow millet on enough to furnish all the feed of that kind we want, and the rest we summer fall. All of it can be seeded without replowing in September. We sow six quarts of timothy seed per acre; have never tried anything else, as that is good enough, no other hay being quoted so high.

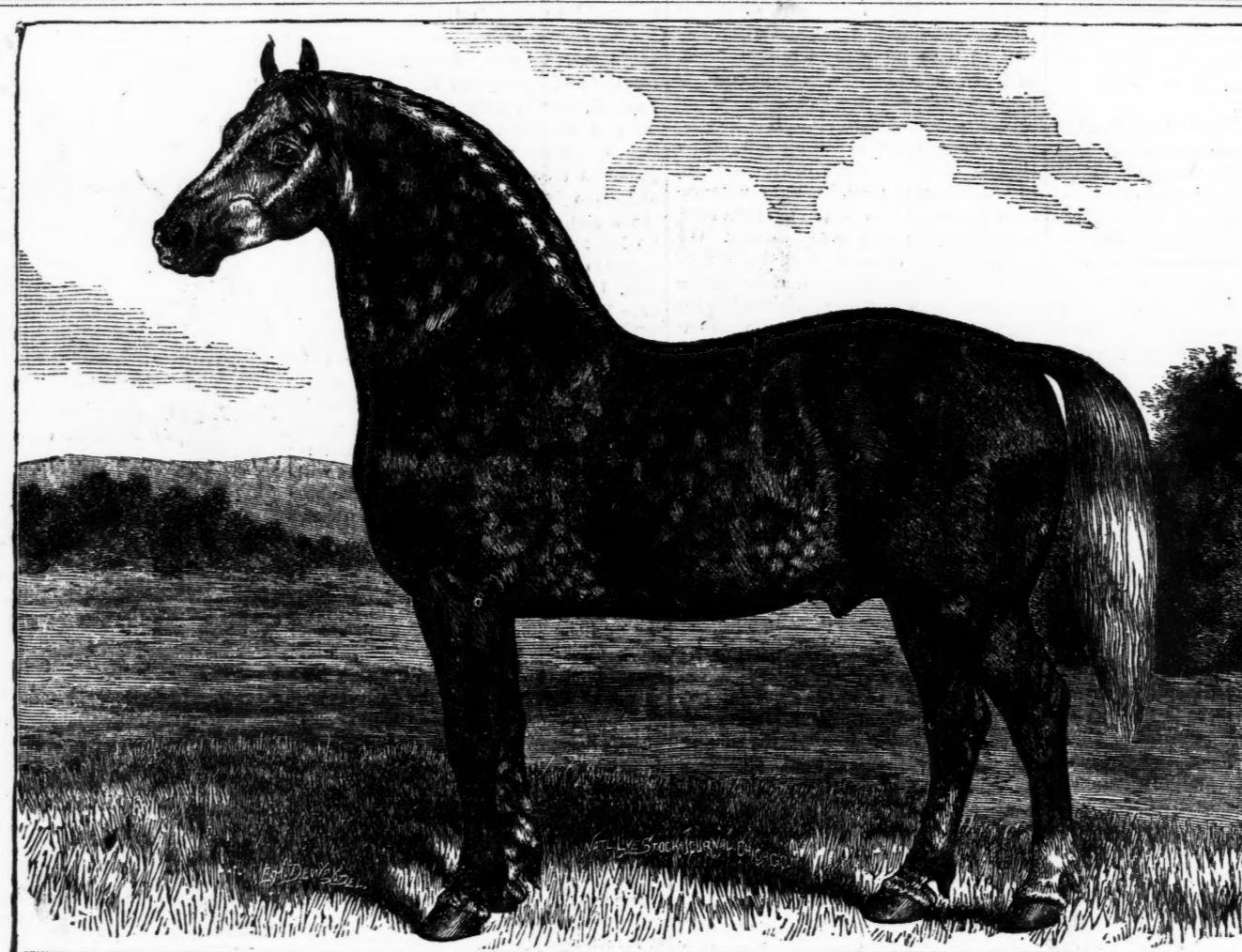
The swamp that is summer fallow is usually seeded earliest (Sept. 1st), and gives the best crop of hay the following year, but the millet and potatoes pay for all work done, one year sooner than the timothy, and make up for the difference of the two crops of hay.

"We would plow our swamp by all means, and can do it by the use of wooden shoes on the horses' feet, any time, wet or dry. At ordinary times a plow 8x10 inches fastened on each foot, will make a stalk which will nearly meet on top of the loop. These loops are fastened well back on the wooden shoe near the holes for the heel calks. With a small piece of No. 15 steel wire we join the loops, and make the shoe fast to the hoof by twisting until tight. With the upper edges bevelled and the corners somewhat rounded, we have a shoe that any horse can manage, and any man can make. The shoes made of light pine, two inches thick, are probably as good as any thing. As the swamp becomes dryer in the fall, leave off the front shoes, and if we yet make them larger."

If any FARMER reader has succeeded in reclaiming swamp land, with similar formation as the subscriber desires to subdue, they will confer a favor upon many owners of such land by describing their methods. Mr. Charles has been very successful with his practice, and no doubt plowing is the only really effective way of subduing the native weeds and grasses in order to prepare the ground for a better paying crop.

A distinction must be made between marsh lands where the surface is really the water level, and marshes like the one described. The former are not susceptible of any improvement, while the latter can be made the most valuable lands in the State.

"JOUX," said the butter dealer, "always put in a couple of sheets of paper when you weigh. Customers will think you neat and cleanly in your business. They don't like to have their butter slapped on a scale that, for all they know, has never been washed. And besides, there's a good profit in buying paper at 1 cent per pound and selling it for 35 or 40."



PERCHERON-NORMAN STALLION "CHERE,"

Winner of First Prize and Gold Medal for three-year olds at Paris Exposition, 1878. Imported with thirty-five others, by

M. W. DUNHAM, Wayne, DuPage County, Illinois.

Owned by J. McMillen, Mendon, F. P. McMillen, Nottawa, and A. P. Thurston, Burr Oak, St. Joseph County, Michigan.

ORCHARD GRASS.

FARMERS' CREEK, March 17th, 1884.

To the Editor Michigan Farmer.

Will you please tell me the habits and growth of orchard grass and its quality for hay and pasture? Can the seed be mixed with June clover seed and sown and do well? Where can the seed be found, and at what price?

SUBSCRIBER.

Orchard grass is but little known among farmers generally, although hardly a neighborhood but has had a little on trial, yet for some cause it does not make headway in establishing itself as a stayer. Every experiment with it is pronounced a success, however, by those who have tried it. If farmers could be assured that it had the quality of renovating instead of depleting the soil, the assurance would be much in its favor. It grows rapidly, and it is said that animals feeding on the bare ground at night will find their breakfast grown for them in the morning from this grass. It is a perennial grass of strong, rank growth, about three feet high, the stalk and leaves roughish, the leaves broad, light green, and five or six on a stalk. It bears a branching head, with short, tufted spikes, something like barn grass, only very much shorter and one-sided.

Hon. J. S. Gould, an excellent authority, of this grass: "The testimony from all parts of the world for two centuries past establishes the place of this species among the very best of our forage grasses, and we have not the shadow of a doubt that the interests of our graziers and dairymen would be greatly promoted by its extended cultivation. It is always found in the rich old pastures of England, where the grass is sown as the manure, and is a great benefit to the soil. It is sown in this vicinity. There may be seasons and soils that will make a good showing from the use of salt on certain crops, and perhaps on all, and it is well to experiment in a small way, to satisfy the desire for knowledge on all these controversial points.

The usual amount applied is 200 lbs. to the acre, and it is sown as soon as the ground is sufficiently settled to admit a team and wagon on the land. It can be very evenly distributed from the rear end of a wagon.

If salt does stimulate the growth of plants it comes long after its application, and is seen in the following crops of clover.

I have seen extremely large crops of clover on fields the year following its application to wheat, but whether this followed as an effect of the salt is quite problematical, and can only be determined by a carefully conducted series of experiments. An Experiment Station might be of immense value to farmers to settle these difficult questions. A. C. G.

test, that he ordered a carload for his own use the next season, and directed his man to sow it on the whole farm, woods and all. He has sown no salt since, and it is fair to presume that his enthusiasm waned, from the observations made during that season. Two carloads were distributed the same season among a dozen or more farmers, who agreed to experiment on the different crops. The test was fairly made, and not a single report was made favorable to its use on any of the crops of wheat, corn, oats or meadow. It is unnecessary to say that no more salt is sown in this vicinity. There may be seasons and soils that will make a good showing from the use of salt on certain crops, and perhaps on all, and it is well to experiment in a small way, to satisfy the desire for knowledge on all these controversial points.

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A FINE HORSE.

This week we give an illustration of the Percheron horse Chere 855, the property of J. McMillen, Mendon, F. P. McMillen, Nottawa, and A. P. Thurston, of Burr Oak, St. Joseph Co. He is now nine years old, was imported by M. W. Dunham of Wayne, Illinois, stands 16 hands 3 inches high, weighs 1,700 lbs., and is a beautiful dappled gray in color. The 25th. category of the Universal Exposition of Paris in 1878 was composed of stallions three years old or over, of all Nations. France, Belgium and England were represented, but Chere carried off the honors, the large gold medal and prize being awarded him.

COUNT ON THE MANURE.

To the Editor Michigan Farmer.

During my recent trip to New York, I visited John Robertson, an extensive stock-farmer, near Churchillville, in Monroe County. This season he is feeding sixty Ohio steers, and has made a practice of weighing them on the first of each month in order to ascertain the gain, and also the proper amount of corn meal it would be safe to feed without danger of "surfeit," and he said it required six months of heavy feeding, and that there was more profit in the gain of the last two months, than in the preceding four months. His rule was about one pound per day, in two feeds, for every hundred pounds of gross weight, but had exceeded that a little by way of experiment on those weighing over 1,000 pounds, giving a steer weighing eleven hundred pounds, six pounds of corn meal morning and night, in addition to all the good hay he could eat. In reply to my question as to profit, he said that the sale in spring did not always show a

large moneyed profit, but he added with much emphasis, "We count on the manure, which makes better crops."

Now old mother earth is very generous and always pays large returns for any well directed labor and elements of fertility which we may bestow upon her. Therefore the subject of fertilizers and how best to prepare and apply them is a proper and may be made a profitable topic for consideration.

He who puts only enough straw under his stock at night to prevent their hairy coats from becoming badly soiled, loses sight of two good returns for a larger investment. Work-horses, especially, should have plenty of clean, dry bedding in order to rest comfortable, and such material should be used as will make a good fertilizer, when saturated with urine and the excretion.

Some time ago I noticed a statement in the FARMER that the greatest benefit to the soils and crops would be obtained by hauling fresh manure direct from the stable and spreading it upon the field. It was claimed that by piling and forked over, which induced rapid fermentation and decomposition, the most valuable elements of the manure were lost. Would not more be lost by hauling out, especially in winter, and spreading before any fermentation began, thereby subjecting the fresh manure to the bleaching sun and drying winds? Would not this exposure on the surface for weeks and perhaps months, render it nearly worthless?

On frozen slopes during thaw or rains the leachings would flow down when the fertilizing properties of the manure were least needed. Is not fermentation necessary in order to render the best elements of stable manure available as plant food? Is it not a fact, supported by the most successful practice, that the greater benefit is obtained by "forking over" and wetting sufficiently to prevent "fire fang," and then plow under soon as possible after spreading? Stables should be so constructed and vegetable absorbents used, such as dry muck, leaves, straw, &c., so as to save all the liquid manure and urine, which contain the larger per cent of available manure for the crop.

A few years ago, as I was riding to the city, I noticed in a field adjoining the street a large pile of coarse manure, and over the flat top of this pile, which was four or five feet high, a heavy coating of leached ashes. Passing along a short distance I overtook the proprietor, who is well known throughout the state of Michigan as a skilled landscape gardener, and who has had much to do in laying out our public grounds. I asked him to ride, and after he was seated ventured to call his attention to the coating of ashes on the manure pile, and that it was not in accordance with the present accepted theory of our leading agricultural.

The old Scotchman's reply was, "There is money in thing in theory that's not good in practice." Now there is a wide difference between a false and true theory, and yet we must admit that most of our successful tillers of the soil are the industrious, thinking ones, whose eyes are ever open; often judging of causes by effects, and who are always comparing mental notes, although they may not have been favored with the best school advantages which are so desirable in order to make the best possible use of good observations and lead to wise conclusions. Nor is this

all. Good plans will be of no avail without industrious and good execution. There can be no specific rule for the proper management of all soils or any fertilizer that is the very best for all crops. There must be an intelligent understanding of what is required in order to bring about a desired result. Heavy clay soils, especially, require much discretion as to the time and mode of working, as well as in the kind of fertilizers to be used. I have never yet seen a farm which would not be benefited by a heavy coating of stable manure well plowed under, and in my opinion there is no commercial fertilizer which can fully supply the want of it. We must feed more on the farm if we want the farm to feed and clothe us, not only now, but in old age. A systematic rotation of crops which includes one or two seasons of pasture and a good clover sod, to be plowed under, is probably the most economical way of increasing or even retaining the fertility of the soil. In making plans for the year we should so arrange that we can "count on the manure" if we wish to count anything else which will be of value to us in worldly goods. One crop may exhaust certain elements in the soil and still enough of other properties be left to produce a different crop. Careful observation and experience teaches that the requirements of the Divine law are in perfect harmony with the laws that govern any commonwealth, or which insure the greatest happiness in the home or the welfare of the individual. So we may reasonably conclude that our wise Father has established physical laws, which if rightly comprehended and observed, will lead to the very best practice.

E. M. P.

KALAMAZOO, March 30th, 1884.

PENCIL SKETCHES BY THE WAY.

Kalamazoo and St. Joseph Counties Visited—The Farmers and Stock Men Whom we Met—Stock in St. Joseph Co.

In route from Cass Co. we again passed into Kalamazoo Co., but only stopped at Schoolcraft, where we met George W. Judson, one of the most thorough and energetic young farmers in the town, setting by his example a pattern for older ones to follow—in fact putting them quite to shame, for he is the only owner of thoroughbred stock in the town, while they prefer to own bank stock and "scrubs." His "Prairie View" farm is entirely of prairie land, of which

The Farm.

LEACHED ASHES AGAIN.

To the Editor of the Michigan Farmer.

In a recent issue of your wide awake paper I see that Niles Giddings of Utica, is seeking to learn how much value there is in leached ashes as a fertilizer, and the inquiry is answered from a scientific standpoint by A. C. G. in so lucid a manner that it will probably settle the question with friend Giddings. And I, in this instance, do not propose to get up any argument in the way of refuting ideas, for his conclusions, based upon a chemical analysis, are in perfect accord with mine after having some practical experience in that direction. In this connection allow me to say that I read all of A. C. G.'s articles with great interest, for in the main I regard him as an intelligent writer, although at the same time I take exceptions to some of his views, as, for instance, when he recommends top-dressing clover with barn-yard manure preparatory to planting the ground to corn a year hence. Now, would that be economical? How much of that manure would there be left at the end of the year that the corn would get the benefit of? He says it would stimulate the clover and prepare the ground to produce a far better crop of corn. I shall not deny that the corn will receive some benefit from the top dressing the year previous, although a large proportion of the fertilizing properties of that dressing will have been wasted to the four winds long before the corn is ready to receive it. And how much more would the clover be benefited by it than by a dressing of a hundred lbs. of gypsum to the acre? And mark the difference in expense. While that amount of plaster would cost say fifty cents to purchase and apply, the manure would cost somewhere from five to fifteen dollars.

When I purchase manure I pay fifty cents a load and it costs as much as that to get it applied to the land, and I want fifteen good loads to the acre, so there is fifteen dollars expense to manure well one acre of land. Now, it may be asked, will it pay? I answer yes, for from that dressing I can raise in the aggregate on hundred bushels of wheat in three successive seasons and have the ground left in as good, if not better, condition than before manuring; providing, of course, the seasons are not unfavorable for wheat. I have done even better than that. In '77 and '78 I took 79 bushels to the acre from the ground thus treated, and then seeded to timothy and clover, and cut three tons of hay to the acre for three seasons following. But I leave no manure on the surface. I want it plowed in as soon as may be after being spread, and if it be a fact that those volatile gases only energize the plant instead of furnishing food for it, I think they can be utilized for that purpose far longer when permeating the soil than when in the atmosphere. Economy is or should be the watchword with the farmer if he expects his balance sheet to show a favorable report. Furthermore, in connection with A. C. G.'s advice to top-dress clover for the benefit of a corn crop, a year hence, I find that he was being criticised at a club meeting when he says the odor arising from manure put upon the ground is no better evidence of exhaustion than that which exhalates from a clover blossom. Now, I would ask, where is the parallel? Who has not experienced a tingling sensation of the olfactories on entering a horse stable in warm weather when ammonia was arising from the liquid manure and charging the atmosphere with its pungency, and was it not escaping in the atmosphere? While it is known to be extremely volatile in its character, it is supposed to be one of the most potent elements of fertility. And how came it in the manure? It is not supposable that the animal inhaled it from the atmosphere, hence it must have inhaled in the organic matter on which the animal fed. Such being the case, if the manure be left upon the surface the salt, if in such condition it could be, would immediately become liquified, then almost simultaneously gaseous, and hence, according to A. C. G.'s theory that the volatile gases do not furnish food for the plant, it could have none of it in its organic structure.

Again, what is it that fire fangs a manure heap, and renders it almost entirely worthless? even spontaneous combustion has been known to occur. It is doubtless a combination of gases, or salt, and with the latter doubtless phosphorus is made to assist, and all these different elements, which combined to produce this worthless condition of what was left, have gone into the atmosphere and forever are lost, when in the main they constituted the principal value of the manure heap, and should have been so managed that the farmer's crops could benefit thereby. That is to be attained by plowing it into the ground before it has a chance to escape.

Again: If, as A. C. G. says, the plant gets its food through the rootlets only, and that in a liquid form, how is it to be obtained when the manure is on the surface and the roots far beneath? Water becomes pure by infiltration, hence manure, in any form, could not follow it to any considerable depth. So it seems to me, putting his theories together, palpable discrepancies appear.

Now, let us take an analytical view of the odor from a clover blossom. Instead of its being the effect of decomposition it is that of integration and aggregation, and its fragrant odor is as much due to the accumulation of that delicate saccharine fluid, or more so, than to the organic matter, in which case nature is performing an office altogether different from that of decomposing manure. It is building up in the one case and tearing down in the other. She is prolific in providing for all living creatures; were it not so from whence would the busy bee gather its store and furnish man's table with one of the most delicate sweets? I am not a little surprised that A. C. G., with his seeming intelligence should advance such ideas.

One other suggestion in handling manure and I will leave this part of the subject: I am aware that very many farmers are in the habit of top-dressing their

wheat in the fall to defend it against the ravages of winter. I will not deny that it has such effect, but no more so than when plowed in, and the ultimate benefit to be derived therefrom is almost incomparable. I experimented in that direction one season by surface-dressing a small portion of a wheat field, while the rest received deep tillage. I discovered no difference in its standing the winter or spring freezing, but when growing wheat the following year on the same ground I found that that portion which was top-dressed was far behind the other in its producing capacity; and for further proof in support of my position I will cite one other corroborating instance: A few years since my neighbor had a field of wheat so literally hoed out by the frost that he sowed it to spring wheat, except a small portion which had a few loads of manure applied one, two or more years previous, on which the wheat stood firm, showing no signs of being disturbed by the frost. I find from experience that clover seeded upon ground that has previously been well manured, although two or three grain crops may have been taken from it, will resist the action of frost when other ground will allow the crops to be hoed out.

But to revert to the subject indicated by the heading of this article, I will proceed to give my friend and schoolmate, N. G., a little of my experience in that direction. I have three-fourths of an acre of ground that has been devoted to the culture of onions for fifteen years or more, and by constant manuring from year to year the white grubs had become so numerous that they seriously injured the crop, and to eradicate them I withheld the manure for two seasons and applied leached ashes, putting on the two seasons about twenty good wagon loads. The first season I discovered no lack of fertility by diminution of crop, but the second, notwithstanding I applied about an equal quantity of marsh muck, there was a palpable falling off in the yield. I then readily came to the conclusion that the manure previously applied had become exhausted, and that the ashes and muck were in no sense an equivalent. I also applied muck freely to a small potato patch, and there it showed a marked effect, which was to make the potatoes very scabby—nothing further. I therefore consider there is little or no value in either of those elements as a fertilizer. Yet ashes have a tendency to make the land heavier, and a light sandy soil would be benefited in that direction; and if the distance to haul them be short it would doubtless pay to apply them. Still I would quite as soon have clear clay. A proper compound of mineral elements is essential to a successful growth of the various farm crops. L. D. OWEN.

FEEDING SHEEP FOR MUTTON.

(Read before the Wool Growers' Association of Southwestern Michigan, at Kalamazoo, by Hon. Wm. G. Kirby.)

The first and most important thing in feeding sheep successfully, is to have suitable buildings to house them, so as to protect as far as possible from extreme changes.

Experience has taught us that an even temperature is conducive to health, not only of human but of animal life. And especially is this important, where we expect to arrive at any degree of success in fattening animals.

The enclosure should be made tight and warm, with good and sufficient ventilation; the doors and windows so constructed as to be easily opened or closed, as the weather demands. And this a practical man will very soon learn.

We all understand that an animal exposed to cold below a certain degree, requires more food to keep up animal heat. Just so far as we are able by artificial means to keep up a temperature about equal to that of the animal, just so far we have relieved it from the necessity of consuming an amount of food sufficient to keep up an equilibrium.

We find a basement barn the most convenient place to house sheep, for many reasons; the most important of which is, that the storage is all above, and can be gotten into the racks and pens without waste; and we also avoid the opening of outside doors every time the sheep are fed, or we go into the pens for any purpose.

We must bear in mind that in severe cold weather, every time we open a door into the pens, we do it at the expense of the sheep, thereby lessening the profits. Our fathers contented themselves with open sheds, if they faced the east or south, simply because they had not learned better. Randall, the standard authority on sheep husbandry, recommends such as being proper places to winter sheep. But in this climate we know by sad experience that they are not. There is more danger of exposing our sheep to severe cold than in keeping them too warm. In dividing into pens, we find about ten feet, including racks, the most convenient and economical. In regard to rack and feed trough, we have to be governed by circumstances, somewhat. Anything that is most convenient to get the food into, and will accommodate the sheep best, and so constructed that they cannot waste their food, will answer the purpose.

The pens must be kept clean by frequently littering them with straw, forest leaves, marsh hay, or any good absorbent that is clean and dry. It is a good plan to sprinkle land plaster over the pens before littering. The pens must be supplied with fresh, clean water, so arranged that sheep can have access to it at all times.

Sheep require a certain amount of salt, and if allowed, can regulate that better than the shepherd. And right here let me say, whether by salting hay and straw during the process of mowing or stacking, which is practiced to some extent, we do not force our stock to consume more salt than is absolutely necessary, and may be detrimental to the health of the animal?

We make a compound of ten parts wood ashes, six parts salt, two parts alum, and two parts sulphur, placed in boxes where sheep can have constant access to it. This is while they are in winter quarters on dry feed.

One very important point however is to make proper selections. This requires

judgment and skill. We find our best feeding sheep with short head, broad between the eyes, short neck, full breast, broad back, deep body, square rump.

In putting them into pens, great care should be taken in grading them as to size, constitution and habits. After placing them in pens, the shepherd should carefully watch, and if any are not doing well, as will most always be the case, sometimes we will find slow eaters, or if from any cause some are not doing as well as the rest of the flock, they should be removed to a pen by themselves, and nursed until they get up to the average standard, when they can be returned. In feeding great care must be exercised. Feed them all the coarse fodder they will eat. If they are lying down, quietly ruminating, let them alone. But if they are up walking about, and seem restless, feed them any coarse fodder you are using at the time, whether two or five times a day. Feed grain twice a day—morning and evening. Commence feeding grain very light at first, and increase by degrees, as they become accustomed to it, until you can feed all they will eat and assimilate well. I have no doubt but that roots, such as turnips, carrots, beets or potatoes can be fed profitably in addition to our present mode of feeding. But this remains to be tried, as I think none of our sheep feeders have tried the experiment to any extent at least. We do not consider it advisable to grind feed for sheep, except very old ones and yearlings. Oil cake meal mixed with grain adds very much to the fattening properties of sheep feed; especially is this recommended for lambs. While we have made much improvement in the past few years, sheep feeding is still in its infancy. The American farmer has just begun to learn to feed sheep. This being one of the important branches of husbandry, we shall be led to give it more attention than we yet have, and shall make more rapid progress in its development. And in the near future we shall witness greater success than we have yet attained.

GET READY FOR SPRING.

BOY'S FARM SCHOOL, FRANCISCO, March 28, '84.

To the Editor of the Michigan Farmer.

For fear some of my brother farmers may let the winter slip by without making sufficient preparation for the coming summer, I write these lines, naming a few things that can now be done, that will greatly facilitate matters in the press and hurry of business soon to come. First look over your harvester and binder, or reaper and mower. See that all the bolts are in place and none of the nuts loose.

Try the knives, see that they are well riveted on. Also try each guard, see that none are loose, and that every nut on the machine is screwed up tight. Have a few extra sickles and guards on hand in case you should break down; you will not have to run to town and leave your hands with nothing to do. Grind both sets of mower knives and hang them carefully away. Look over your drill, wagons, cultivators, harrows, etc., in the same careful manner. See that they are in perfect working order, and that there is nothing about them so nearly worn out that it will not last the season through.

Purchase all the small tools that you will require during the summer—two or three forks, shovels, hoes, corn cutters and all small articles more than you need. It is poor economy to have a man thrown out of employment at a busy time for want of a tool that is accidentally broken. Have a sufficient number of whiffle-tree, double-tree and clevises for every tool requiring same, so there may be no changing when time is valuable, and your team is standing still. For a clevis pin use a bolt with a nut on and head the nut with a slight tap on one side with a hammer, it keeps the nut from working off, but at the same time it can easily be gotten off. None can tell the amount of trouble and annoyance this will save, until they have tried it. The interest on the money invested, and the wear and tear of the extra sets, is nothing compared to the saving of time. Next, look to your harness, have two or three straps of each kind that are liable to break. See that none of the pieces are worn so badly that they are liable to give out when a hard pull comes. Think well of every piece of work that is to be done, and see if you cannot make some preparations for it, some little detail that can be attended to that will help along when your time is worth more than now. Last but not least, a good pile of nice seasoned wood, split finely and conveniently near the kitchen stove. If these suggestions are closely followed, your work will move on as if some unseen power was pushing it, and the result will be less annoyance, more content with your lot and greater prosperity.

C. W. RIGGS.

Few Words and More Butter.

The Wisconsin Dairymen's Association last year offered prizes for the best essays on butter-making, the essays not to exceed 250 words. Competition was active, and many valuable little treatises was the result. The first prize was won by D. W. Curtis, of Fort Atkinson, and reads as follows:

Select cows rich in butter-making qualities.

Pastures should be dry, free from slough holes, well seeded with different kinds of tame grasses, so that good feed is assured. If timothy or clover, cut early and cure properly. Feed corn stalks, pumpkins, ensilage and plenty of vegetables in winter.

Corn and oats, corn and bran, oil meal in small quantities.

Let cows drink only such water as you would yourself.

Gentleness and cleanliness.

Brush the udder to free it from impurities. Milk in clean barn, well ventilated, quickly, cheerfully, with clean hands and pail. Seldom changing milkers.

Strain while warm; submerge in water 48 degrees. Open setting 60 degrees.

Skin at twelve hours; at twenty-four hours.

Care must be exercised to ripen cream by frequent stirring, keeping at 60 degrees until slightly sour.

Better have one cow less than to with-

out a thermometer. Churns without inside fixtures. Lever butter-worker. Keep sweet and clean.

Stir the cream thoroughly; temper to 60 degrees; warm or cool with water. Churn immediately when properly soured, slowly at first, with regular motion, in 40 to 60 minutes. When butter is formed in granules the size of wheat kernels, draw off the buttermilk; wash with cold water and brine until no trace of buttermilk is left.

Let the water drain out; weigh the butter; salt, one ounce to the pound; sift salt on the butter, and work with lever worker. Set away two to four hours; lightly re-work and pack.

Breeding Shorthorns for Beef Alone.

What part of all the Shorthorns are to-day upon the range? Not one per cent. How thoughtless, then, to consider it simply as a beef breed. It must, like all breeds, stand upon its merits. Its sales must be mostly in States divided into farms, and generally where good husbandry has been established. The true place for the Shorthorn is where grass and corn are plenty. Its grand form and its graceful lines of beauty are rounded out by good food and plenty of it. The Shorthorn is an example of the effect of the best digestion and assimilation. That produces an unrivaled carcass of beef, and when, instead of beef, it is turned to the secretion of milk, you have a result no less remarkable—fifty to seventy-five pounds of milk per day. The Shorthorn cow, in numerous instances, has proved herself a great milker, with good quality. Why should its breeders persist in its being a beef breed? They are great wiser than we are.

For the Shorthorn cow that yielded seventy-five pounds of milk per day, and her calves were remarkable feeders, laying on 100 pounds per month upon skim-milk, oil-meal, and ground or unground oats. It was an easy matter to bring her calves to 600 pounds at the end of six months, and, in one instance, a steer calf of hers reached the remarkable weight of 1,200 at a year old; and the cow herself fattened rapidly when not yielding milk. —*National Live Stock Journal.*

Agricultural Items.

The roots of an acre of good clover are estimated to contain as much nitrogen as 800 lbs. of Peruvian guano.

THE native farmer of India, with a crooked stick for a plow, manages to raise 11 bushels of wheat to the acre.

A FARMER who has for three years practiced sowing the largest and plumpest kernels of wheat, says he knows for a certainty that his crop improves.

THE new machine for separating cream from milk by centrifugal force does not promise much help to the average dairyman. It must be operated by a steam engine, which few dairymen possess.

REMEMBER that sweet corn is a most excellent green fodder crop. The ears add greatly to the value of the fodder, hence it is more profitable to plant so the crop will ear abundantly. One acre of sweet corn will feed forty cows for ten days.

ONE thousand pounds of strictly "gilt edge" butter are sold every week in the Boston market at from 60 to 90 cents per pound. New York takes from three to four thousand pounds at the same price, and in both cities the demand is not equalled by the supply.

RICHARD GOODMAN, in the *Rural New Yorker*, says ensilage may be considered a safe and lawful substitute for the pump in increasing the amount of milk, where quantity, not quality, is the desideratum. He thinks makers of gilt-edged butter have no use for ensilage so long as they care to maintain their reputation.

THE Rural New Yorker says: "Speaking of commercial fertilizers it does not pay to buy low grades. Here is a fertilizer that is worth \$40 a ton. Here is another that is worth \$20. It is cheaper for the farmer to buy the first because he gets twice the value of the second, and has no more freight to pay, while it can spread on the land in half the time."

A WRITER in the *Southern Planter* thinks that the best way to make ensilage is to cut it down, shock it up and let it stand one week in the field before beginning to cut it up. The advantage of letting it stand for a while is that some of the water sap is evaporated. It seems to be sweeter, and loses that sickening green smell which fresh green fodder has when cut up.

AN IOWA correspondent of the *Western Rural* says: "My full blood Merino ram will stand out in the blizzard and eat his oats when the Cotswoold will run to the barn and huddle up and shiver, and when I come to open the door I have got to go and drive the ram in. When I go up toward him he will look up at me as if to say, 'Let the wind blow so I get my oats and hay on me.'

THE members of the Elmira Farmers' Club talked over the merits of peas and corn as food for fattening swine. One member had found peas equal to corn except as regards the quality of the pork. Meat made from swine fed on peas was more oily than that made from corn, but otherwise was quite as good. Another member spoke very highly of peas as food for cows in milk. Peas tend to increase the supply and keep it steady."

From Wm. T. Bartlett, Postmaster for 25 years at Belgrade, Me.

"I have been troubled with a severe cough for nearly one year; have been treated by two of the best physicians I could find; my case was considered past cure. The physicians did all they could to cure me, and considered my case a hopeless one. Finally, as a last resort, I was advised to try Adamson's Botanic Cough Balsam, to which I owe my present health, which is as good as ever."

W. M. Y. BARTLETT, Postmaster, Belgrade, Me.

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Horticultural.

Resources of Fertility.

Dr. R. C. Kedzie, in a recent address before Michigan horticulturists, pointed out some resources of fertility aside from barnyard manure, which is not always available to market gardeners and fruit growers in sufficient supply. Much is used much less generally than it deserves used; for an experiment at the Agricultural College showed that stable manure composed with it was doubled in value by the muck's own combined nitrogen and its power to absorb and retain ammonia, and its prevention of loss of soluble salts by leaching. As a green crop for plowing under, clover was described as "the red-plumed commander-in-chief of the manorial forces," but the length of time required for its maturity is an objection to its use in horticulture. As a substitute, the cow-pea was suggested as likely to attract more attention when better known. A rapid grower and efficient accumulator of nitrogen, it can be turned under the first season. At the South they secure two manorial crops in one season by sowing the cow-pea early in the spring and letting the pea grow until a few seeds ripen, when the whole crop is lightly plowed under; the matured seeds send up a second crop to be plowed under in the fall. Whether we can secure such double crop in Michigan I am uncertain.

Animal remains of every kind—flesh, blood, skin and bones—are very rich in plant food, and should be made to contribute to the grand levy of life:

"The man who drags his dead horse or cow off into the woods there to pollute the air of the neighborhood, or teach the dogs the handy lesson of helping themselves to a free feast, whether of dead cow or living sheep, is a fool. If these animal remains are composted with muck no offensive odors are given off, and a large amount of very valuable and inoffensive manure is made. These animal remains are valuable because they are so rich in combined nitrogen, and because they decay so rapidly that they benefit the crop immediately. But even those which decay slowly, such as hair, leather, and woolens, may be made available and active by composting with wood ashes slightly moistened, and in this way old rubbish may be made to reappear as luscious fruits. Any waste material that gives off the smell of burnt feathers during combustion should not be burned, but converted into manure for the nitrogen it contains."

The Professor says that composted with twice their bulk of unleached ashes, kept slightly wet to enable the potash to act, and turned every three or four weeks, bones will be softened in three months sufficiently to crush under the blows of a shovel. He does not favor home use of the acid process:

"Bones may be brought speedily into active condition by the action of sulphuric acid, making superphosphate; but the farmer cannot afford to make it a general rule, because the acid costs so much. The manufacturer makes his own acid for about \$5 a ton, while you cannot buy it in moderate quantity for less than \$40 a ton. It is better and cheaper to buy superphosphate ready made, when you can get so reliable an article."

A Home-Made Dry House.

F. L. Reeves, of East Palmyra, contributes to Johnston's "Fruit Notes" the following: The building, a frame structure 17 by 24, had been formerly used as a tenement house; it was built, however, for a workshop. Three years ago the apple crop was enormous in this section and it became apparent that unless we could hastily improvise a dry-house, some hundreds of bushels of apples would waste on our hands. Other considerations led us to believe that the time had come when a dry-house must be included as a part of the farm machinery. Another year there would be some thousands of quarts of berries to be disposed of. Some neighbors had berries too, that invariably ripened at about the same time of year as those growing upon our lands. After a picking or two, the local market would "cave in" and the profits were gone. So we took the "old mouse-eaten shell," as it was called by the boys, and remodeled on the inside for a dry-house. All partitions were removed except one mid way running crosswise of the house. This gave two rooms of equal size on the ground floor. The chamber above, some four feet at the eaves and some seven or more feet at the ridge, was divided in the same way. Under one end of the building we excavated a small cellar for the fire-place.

The floor of the room, directly above this was removed, as well as the corresponding chamber floor above. The fire-place was made of brick, 2x4, 3 feet high. In one end was placed a small iron door, and half-way to the top a grate was placed to hold the fuel, leaving room underneath for the ashes. Outside of the fire-place a single course of brick in thickness was laid, six feet long, six feet in width and four feet high. From the top of this structure scantling was placed, reaching to where the chamber floor had been—these were spread at the top, so that they included as much space as was formerly occupied by one-half the upper floor. On the inside of the scantling from the brick work upward, lath and plaster were used, making a continuous whole—an inverted funnel with square corners. A ventilator on the roof completed the heating apparatus.

The remaining portion of the house was not disturbed. One-half of the building was taken up by the dryer. This left a room on the ground floor 8x12 feet and a chamber above of like dimensions. For the comfort of those preparing the fruit to be dried, a small stove was kept in this room, and on cold days the boys would have a fire. When the fruit was peeled, cored and bleached, barrels hoisted by means of a rope and pulley carried it to the floor-above. Two sets of racks are used—one set being level with the chamber floor, the other a foot higher. There are four racks in a set, the lower of the two sets is made of perforated tin. The racks slide upon barn door track, resting upon 2x3 scantling. The tracks are laid so as to project over

the furnace. An opening in the partition allows the racks to be placed over the fire or withdrawn at the will of the operator. Ropes and pulleys reduce the labor to a minimum. This building as now arranged will dry 60 bushels of apples, ready for market, in a day of 24 hours, and will require not far from 350 pounds of coal. This has proved a cheap and satisfactory dry-house. All the material purchased, heating apparatus, lumber, racks, etc., cost not to exceed \$90. The planning and construction was all done by persons upon the farm. Any one having some little knowledge of tools, and using rough lumber, working at odd times, could put up a similar structure with but small outlay of money. The fruit sold with the best evaporated.

The Ageratum.

The Ageratum is a class of green-house perennial or garden half-hardy annual plants of Mexican origin, belonging to the natural order Composite. They are, as a class, plants of erect, bushy habit, with opposite, mostly cordate bright-green leaves, producing their brush-like blue or white flowers in terminal corymba in the greatest profusion from July until frost, and when grown as greenhouse plants from October until April. They are indeed old garden favorites, and can be used for bedding or massing purposes as well as for forming blue or white ribbon lines, while their cut flowers can be used to good advantage at all seasons of the year, for with a little care and attention they will last for a week or more, and it may be well to mention that their blue flowers change to a beautiful mauve when seen by candle-light. The Ageratum are popular plants with our florists on account of the ease with which they can be cultivated, the immense quantities of flowers which they produce, and the length of time the flowers remain in perfection after they have been gathered.

When grown in the flower-border or for ribbon-lines, massing or bedding, they should be given a well-enriched, deep soil, and copious waterings during seasons of drought; pinch back the leading shoots if necessary to keep the plants in shape, and to remove all flowers as soon as they commence to fade. In the greenhouse they should be planted out on the benches in ordinary potting soil. Water should be liberally supplied, and the young plants frequently syringed in order to prevent the attacks of the red spider, to which pest it is unfortunately very subject when grown under glass. A weekly watering of liquid manure is also very beneficial. Propagation is effected by seeds and cuttings, the latter being the best method of perpetuating the several varieties. The seed can be sown about the first of April in a shallow box of light, rich soil placed in a gentle hot-bed; sow thinly, and cover with a mere dusting of light soil. Keep close and moist until the young plants are strong enough to handle, when they should be transferred into other boxes similarly prepared, placing the plants two or three inches apart each way. Or they can be potted off into two or three-inch pots. Keep close and moist until well established, then gradually expose to the open air, and plant out when all danger of frost is over, which in this vicinity is about the 10th of May. Or the seed can be sown in a cold frame after the middle of April, and the young plants treated as above advised, but they will not flower as early. If the plants are wanted for the greenhouse for winter flowering, a few of the most promising should be selected and planted in a situation where they can be properly cared for during the summer season. Keep them well pinched in, and all the flowering shoots removed, until they are wanted for the house. About the first of September they can be removed to their winter quarters, planted out on the bench of the greenhouse, or else potted into pots of a suitable size. If pots are used, however, they will not flower so freely.—*Ladies' Floral Cabinet*.

Treatment of Frosted Peach Trees.

L. A. Goodman, a Missouri fruit grower, writes the Kansas City Journal as follows, regarding the treatment of peach trees that have been injured by the recent severe weather:

"It matters not if the wood is colored badly and looks dead. Get you a good pair of shears and a saw and cut off the tops of all the peach trees.

"If trees are five or six years old, or one to four years planted, cut the tops off with shears. On the younger trees cut about two thirds the past year's growth; on the older trees cut down to the two or even three-year-old wood. Make the tops round and shapely, and you will find that they will recover very finely this season and will make good, compact trees, ready to produce fruit next year.

"The peach is a tree that will recover itself and make a rapid growth if well pruned back. If there is only life enough left for the sap to start up the tree the new wood will form over the old wood and they will look as healthy as new trees.

"But if you leave the whole of the top, the chances are that you will never have good trees, even if they should live at all, which I very much question. On old trees take a good saw and cut all the tops off about six or eight feet from the ground; never mind if it does look as if it would ruin them, it is the only salvation for them. A peach will recover if it has only a short distance to send the sap through the diseased wood; whereas, if it had to flow to the tips of the trees it would flow so slow that it would soon be checked by drying up.

"If the root is good a tree will recover wonderfully, but if the root is much injured they had better cut it down.

"The more trees are injured the more they should be cut back, is the sure rule to follow. If you would examine any old peach tree you would find only two or three years of good sound wood next to the bark; this shows that often the trees have been compelled to form new wood over diseased wood, and if you can get a vigorous start early in the spring, it matters not how much the tree is injured, this fruit is recommended far beyond its real value.

A CORRESPONDENT of the New York Tribune says a bushel of apples will make from four to four and a half pounds of evaporated fruit, and when the fruit is scarce will bring 16 cents and upwards per pound. The poor apples, with the cores and

this cutting is early in the spring before the trees start their growth and as soon as freezing is over with.

"In fact I may say that the best peach growers in the west do this pruning every two years at the farthest, and the trees always show a close, compact growth, and not the loose, straggling growth so generally seen. If you once adopt this plan you will always follow it."

Whortleberries.

Take up the young shoots or plants as they grow in their wild state, set them out in rows three to four feet apart, as ground is more or less valuable, and about two feet apart in the rows. Then cultivate as currants, gooseberries or corn, keeping the ground mellow and clean during the growing season. The second year the plants will begin to shoot up from side roots. These may be allowed to grow, if they come up where the standards are unnecessarily wide apart, or be taken up and set out in rows as were the original. There are two distinct varieties of whortleberries, the berries of one of which are very sweet and of light blue color, the bushes of which are taller and more open than the others. The second variety grow in their natural state on clustered bushes about two feet high, bear dark or black berries, and are the most prolific bearers. They are not acid, but nevertheless are less sweetish than the former, and are generally given great preference. Whortleberries grow on almost any kind of soil, and delight in gravelly or stony places, though the soil should be rich and alluvial all the better. Go to the woods, carefully pull up the young plants, be sure to keep the roots moist, plant with care, compacting the earth at the roots, cultivate well, and by and by you may enjoy "huckleberries and milk" to your heart's content.—*Journal of Agriculture*.

Seed Sowing.

During the discussions of the Michigan Horticultural Society at Lapeer, Prof. W. W. Tracy, of Detroit, gave a very interesting talk on the subject of seed breeding, in which he demonstrated that a bud and seed are similar in structure and nature, and that each is an epitome of the plant upon which it grew. He said that we should not choose the largest seeds, but should rather choose in reference to the plants upon which they grew. By selecting seed in this manner, he said, farmers might be greatly benefited. For instance, he once decided upon and wrote out a standard of excellence for a variety of corn that he was raising. One of the points was that the length of ears, in the aggregate, should be 19 inches. In a field of ten acres he found only five plants that came up to the standard. He saved the seed from those, and planted it in a plot by itself. The increased superiority of this plot was very apparent, and raising the standard, seed was again saved. This course was continued five years, when the standard length of ears, in the aggregate, had been raised to 24 inches. In the same manner may be brought about an improvement in other grains and vegetables. In reply to a question in regard to rejecting the kernels growing upon the butts and tips of the ears, he said that he did not consider it particularly advisable.

Starting Celery.

Celery seed should be sown as early in the season, says a correspondent of the N. Y. Tribune, as the ground can be worked. If snow and freezing weather follow, it will do no harm. Dig, break up and pulverize the soil thoroughly, add a light top-dressing of soot, smooth the surface evenly, and scatter the seed thinly, giving plenty of room to make good stocky plants. Do not cover the seed with earth, but press lightly into the soil with a board. Never allow the soil to become dry after sowing, but keep it moist by frequent waterings. If there should be heavy winds, it is best to protect with a light covering. If the seed is slow to start do not be disheartened, but continue the waterings. I have had it lie six weeks before germinating. Of course you will grow none but the best varieties. The Dwarf White Solid is preferred; I confess to a great partiality for the Sandringham Dwarf. As soon as the plants are an inch high thin them. Keep the soil open about them by frequent stirrings, and keep them constantly moist that they may receive no check until the time arrives for setting them out in the trenches.

To get the full flavor of dried or evaporated peaches, they should first be allowed to soak for at least three hours, then cook them slowly; when they are almost done add the sugar, then set them away and let them get perfectly cold. If not used until the second day they will be still better, as they will absorb the sugar and be much richer, apparently. If for use in puddings treat in this way also, as it will repay you for taking thought. Use the juice in the pudding sauce.

Horticultural Notes.

M. P. WILDER, the veteran pomologist, heads his peach trees down to two feet when he sets them.

The currant is a fruit well adapted to being grown with other fruit, since partial shade is desirable for them. A rich soil tends to the best results.

It is now known that the plum curculio sets its peculiar mark upon the apple crop, when the fruit is from half an inch to an inch in diameter. The jarring recommended for saving the plums will prove as successful with the apples.

W. C. STRONG said, at a late meeting of the Massachusetts Horticultural Society that when the Kiefer pear was introduced, and lauded as one of the most wonderful of fruits, all nurseriesmen of any enterprise had to procure it, though they may have hesitated as to its value; and now they have a stock, and it is for their interest to unload, and the result is that this fruit is recommended far beyond its real value.

A CORRESPONDENT of the New York Tribune says a bushel of apples will make from four to four and a half pounds of evaporated fruit, and when the fruit is scarce will bring 16 cents and upwards per pound. The poor apples, with the cores and

skins of others, are worked into jelly which finds a ready market. The area of orchards does not keep pace with the demand for their products.

L. A. GOODMAN, Secretary of the Missouri State Horticultural Society, thinks many peach trees injured by cold weather may be saved by acting on the rule that the more the tree is injured the more severely it should be cut back. This should be done before growth starts in spring. His argument in favor of this mode of treatment is, that a peach tree with life enough left at the root to start the sap up the tree will recover, provided it only has a short distance to send the sap through the diseased wood. On the other hand, if the sap had to flow to the tops of the tree it would circulate so slowly as to soon be choked by drying up.

A BOSTON gardener, who has been very unfortunate in the matter of insect depredations, believes his troubles originated in his choice of soil, which he took from the foot of a high board fence. He argues that in the flight of insect enemies they are quite likely to be driven by wind, or other causes against a high fence, rest on adjacent ground and lay their eggs, infesting the soil of that special locality with an unusual percentage of predators. He advises avoiding the use of soil for plants or hot-beds thus situated. Soil taken from the center of the plot and removed from the fence developed no insects.

A NURSERY firm in the West have for three years past been taking contracts to plant timber for the railroads by the acre, and in three or more years to deliver the groves to the railroads with twenty thousand trees or more to the acre, six feet high, well cultivated and cared for. They also take similar contracts for individual land owners, and in this way have planted nine hundred acres and have contracts for five hundred acres more to be planted next spring. They raise the seedling trees in seed drills, and transplant at one year. The varieties most planted are catalpa, black-walnut, black cherry, white ash, and in Kansas Atlantic, which is too tender for the winter north of the fortieth parallel.

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JOHN J. RYAN, Athletic, B. B. C., Philadelphia, Pa.: "AYER'S SARSAPARILLA cured me." [Cured by it of Rheumatism.]

FRANK M. GRIFFIN, Long Point, Texas: "Has worked like a charm; no medicine can accomplish more." [His child cured by AYER'S SARSAPARILLA of Scrofulous Sores.]

ORLANDO SNELL, Lowell, Mass.: "I enjoy better health than ever before, due to the use of AYER'S SARSAPARILLA." [His child cured by AYER'S SARSAPARILLA of Scrofulous Sores.]

JOHN H. MCKAY, Lowell, Mass.: "I am a perfect man again." [His son cured by AYER'S SARSAPARILLA of Scrofulous Sores.]

MILTON FOX, Dracut, Mass.: "The one I would recommend above all others as a blood purifier." [Cured by it of long standing and severe Scrofulous Humors.]

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JOHN J. CHAPMAN, Nashua, N. H.: "Has worked like a charm; is a perfect blood purifier." [Cured by it of long standing and severe Scrofulous Humors.]

MICHIGAN FARMER

AND—

State Journal of Agriculture.

A Weekly Newspaper devoted to the industrial and producing interests of Michigan.

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P. B. BROMFIELD,
Manager of Eastern Office,
21 Park Row, New York.

The Michigan Farmer

AND—

State Journal of Agriculture.

DETROIT, TUESDAY, APRIL 1, 1884.

WHEAT.

The receipts of wheat in this market the past week were 44,163 bu. against 103,329 bu. the previous week, and 143,635 bu. for the corresponding week in 1883, and the shipments were 38,641 bu. The visible supply in the country on March 22 amounted to 17,551,066 bu. against 16,980,809 bu. the previous week, and 16,593,451 bu. at the same date last year. The visible supply shows an increase during the past week were 18,717 bu. and the shipments were 39,641 bu. The visible supply in the country on March 22 amounted to 17,551,066 bu. against 16,980,809 bu. the previous week, and 16,593,451 bu. at the same date last year. The visible supply shows an increase during the week of 570,157 bu. The exports for Europe the past week were 739,072 bu. against 783,042 the previous week, and for the past eight weeks 5,366,787 bu. against 12,183,808 bu. for the corresponding period in 1883. The stocks now held in this city amount to 131,230 bu. against 145,747 bu. last week, and 224,114 bu. at the corresponding date in 1883. Corn in this market has been weak and neglected, and the movement has been very light. Prices are a shade lower than a week ago, but any sudden demand would surely advance values. No. 2 old is scarce, and last sales were made at 53¢; new high mixed would bring 52¢, new mixed 49¢, and rejected 48¢. On the street farmers realize 48¢/52¢ per bu. The Chicago market is quoted stronger, and spot and futures higher than a week ago. No. 2 spot is quoted at 54¢ per bu., and high mixed (new) at 54¢. In futures, quotations there range as follows: April, 51¢; May, 56¢; June, 57¢. The Toledo market is quoted firm at 53¢ for No. 2, and for future delivery May is quoted at 56¢, and June at 57¢. The following table gives a statement of the visible supply of corn at date indicated as compared with that of last season:

Visible supply in U. S. and Can. 16,980,809
On passage for United Kingdom 1,34,499
On passage for Con. of Europe 496,000

Total March 15 13,860,809
Total previous week 17,811,005
Total two weeks ago 16,928,901
Total March 17, 1883 13,868,809

The Liverpool market is quoted steady at 48¢/9d. per cental for new mixed, and 5s. 0d. for old do., the same figures as noted a week ago. The receipts of oats in this market the past week were 5,192 bu., and the shipments were 6,056 bu. The visible supply of this grain on March 22 was 4,770,510 bu., against 4,545,299 bu. at the corresponding date in 1883. Stocks in this city Saturday amounted to 12,133 bu., against 24,982 bu. the previous week, and 20,902 bu. at the same date last year. The visible supply shows a decrease during the week of 223,009 bu. Market very quiet and steady. No. 2 white are quoted at 40¢; No. 1 white at 41¢, and No. 2 mixed at 37¢ per bu. Both receipts and demand are very light. At Chicago oats are quoted quiet and lower than a week ago. No. 2 mixed are selling there at 31¢ per bu., and for April delivery at 29¢; May oats are quoted at 33¢ and June at 33¢. The New York market is reported firm, but the Wool-Grower says a larger amount than usual of the clip of that State will be consigned to Boston commission houses this season.

In reference to the Boston market the Daily Advertiser says:

"The tone of the market is in buyers' favor, and dealers, in order to make sales, have to meet the views of manufacturers, who have the advantage in the situation. Every time manufacturers come into the market—and they come more frequently than formerly—and the come to buy lower, and the pressure to move prices down is greater than some few weeks ago, dealers always preferring to see prices weaken before the new clip comes in. The only grades of wool that are strong are fine and coarse combing, and they, with fine daleine, are in very light supply. Some Ohio X can be bought at 35¢, and Michigan X will not now go above 34¢. Most of the pulled wool selling ranges from 30¢ to 38¢, with occasionally a lot at higher prices. The best Australian wools are selling at 40¢/42¢, the latter for combing. Some cross-breds are at 4¢."

Futures have been very weak, and on Thursday April deliveries declined to 90¢, but finally reacted and closed the same as spot No. 1.

The following table shows the closing prices of the various deals during the week:

April	May	June
1 00¢	1 02¢	1 04
1 03¢	1 04	1 05
1 05¢	1 06	1 07
1 07¢	1 08	1 09
1 09¢	1 10	1 11
1 11¢	1 12	1 13
1 13¢	1 14	1 15
1 15¢	1 16	1 17
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1 25¢	1 26	1 27
1 27¢	1 28	1 29
1 29¢	1 30	1 31
1 31¢	1 32	1 33
1 33¢	1 34	1 35
1 35¢	1 36	1 37
1 37¢	1 38	1 39
1 39¢	1 40	1 41
1 41¢	1 42	1 43
1 43¢	1 44	1 45
1 45¢	1 46	1 47
1 47¢	1 48	1 49
1 49¢	1 50	1 51
1 51¢	1 52	1 53
1 53¢	1 54	1 55
1 55¢	1 56	1 57
1 57¢	1 58	1 59
1 59¢	1 60	1 61
1 61¢	1 62	1 63
1 63¢	1 64	1 65

Total, March 15, 1884 45,170,602

Total previous week 46,053,889

Total two weeks ago 49,881,900

Total, March 17, 1883 18,853,889

The outlook for wheat has not changed in any important particular. The weather has been very favorable for the growing crop, and the indications point to an early spring. With a light export demand, and stocks very liberal at all important points, it is not to be wondered at that speculators are inclined to keep out of wheat. Stocks, however, are decreasing rapidly, and a change might take place at any moment.

Of the situation abroad the London Miller says:

"Prices do not get worse, nor much better, the anxiety of holders of either wheat or flour is less sharp than it has been. The point to which value has been reduced is a very fine one, and cannot be well made finer. The power further to depress trade would have to be very strong, whereas the reverse power to raise it need be very light. * * * * In reality the main influence on buyers has been the uninterrupted sequence of mild weather, or the absence of ordinary winter obstacles to supply."

Mr. C. Hugel, of Paris, an authority on grain statistics, says:

"England and France have, during the first half of the present season, imported 2,000,000 tons less than last year, and have produced 3,600,000 tons less between them than last year. The result is that both countries have proportionately sold largely, as is seen by the early falling off in the offers of home grown wheat in France, and by the early diminution in those from English farmers since Christmas. After several bad years, English and French farmers are not in a position to hold their wheat as long as they like, but have to sell for pecuniary reasons. General stocks are now in course of diminution,

and the total available wheat in both countries is now certainly below what it was at this time last year."

The following table shows the prices ruling at Liverpool on Monday last, as compared with those of one week previous:

March 31	March 24
Flour, extra States, 11s. 0d.	11s. 0d.
White, No. 1 white, 0 d.	8s. 0 d.
do Spring No 2 8s. 0 d.	8s. 0 d.
do do new 8s. 3 d.	8s. 3 d.
do Western 8s. 4 d.	8s. 4 d.

CORN AND OATS.

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The butter market has eased off some what, and while the top prices paid a week ago are still maintained, it requires a better quality of stock to secure them. In the medium and lower grades the situation is not a promising one for makers of this class of stock. Butter substitutes since the rise in prices are being largely sold in their stead. To how great an extent this is done, and to show that a fraudulent competition butter makers are subjected by the rank dishonesty of the retail grocers of this city, a physician writes one of the daily papers that out of some half-dozen samples purchased by him as butter, not a single one was pure. The bulk of the samples contained 20 per cent of butter the balance being lard. A simple method of testing butter is to melt a small piece on a hot iron. The odor will soon disclose the quality of the butter.

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Poetry.

THE SWALLOWS.

The dusky swallows will return again,
Their love songs in thy balcony to sing,
And once again will beat thy window-pane
With restless, fluttering wing.

But these same swallows that restrained their
sight
That lingered lovingly in years before,
To contemplate thy charms and my delight—
These will return no more.

They hanceyone again will bloom,
Its spray will climb the lattice of thy bower,
And with new beauty in the twilight gloom
Its buds will burst to flower.

But blossoms fair of summers that are past,
Blossoms decked with trembling drops of dew
Which fell like tears of day, too sweet to last—
These will not bloom anew.

Passionate words may the storm silence break,
And buring waves upon thy ear may fall;
Why heart, perchance, from sleep profound awoke
At love's persistent call.

But that blind adoration, given in vain,
Those fond ill usions, dear as they were fleet,
No other will bestow on thee again—
Never again, my sweet.

TWO.

While the sunset maketh golden
All the busy town,
One is boding 'neath her burden,
One waits for her crown,
One is watching, one is dying;
One can only weep—
One, forgetting pain and sorrow,
Smiling, falls asleep.
One, bowed low amid the shadows,
Prayeth Christ for grace;
One is come so near to Heaven
She can see His face.
Searcheth one, with vague endeavor,
For a faith she had;
Dreameth one of life eternal,
Lives forever glad.
One is rich in peace; the other
Seeks for peace in pain;
And two sister souls are parted
Wide as biles and bane,
Till all loves be resurrected
By time's potent rod;
Till all separate lives, united,
Lose themselves in God.
—Hannah R. Hudson, in *Good Cheer*.

Miscellaneous.

MISS JENNINGS'S FORTUNE.

"A letter for you, Miss Jennings," said Fannie Evans, opening the door of the little room where that young lady sat at work; "pa's just come from the office." Miss Jennings broke the seal eagerly. She had few correspondents, and a letter was an event; nor was she the less eager because the address was in a wholly unfamiliar hand. The letter ran as follows:

New York, June 17, 1880.
Miss Catherine Jennings, Bayview, N. Y.

Dear Madam: I have the honor to inform you that by the will of my late client, the Hon. William J. Jennings of Galveston, you are made heiress to his entire fortune. This will was made some years ago, just subsequent to his visit here, and is valid in every particular. There is two or three hundred thousand in money, besides a considerable landed estate. A few formalities only will be necessary to put you in possession. As your late cousin's lawyer and executor I will be happy to wait upon you at any time you may appoint, and give any further information desired.

Very respectfully yours,
JAMES MEAD.

"Two or three hundred thousand—a landed estate! it must be a joke! I never saw Mr. Jennings but once in my life." She got up and walked about the room, inspected herself severely in the glass for a moment, and read the letter again.

"It sounds real," she said to herself as she folded it up, and replaced it in the envelope; "I'll go to the city and see about it—oh, it is too ridiculous! Don't you dare to think it is true!" darkly apostrophizing herself as she tied her bonnet strings before the little glass, "but oh, if it were! what would you do with it, do you suppose? Poppy Evans!" she cried, as a small chubby figure stole past the door, "come here to your teacher at once!"

Poppy came, and Miss Jennings caught her up in her arms.

"Now, Poppy, tell me, if a great big fairy should come into this room, and say 'Poppy, I'll give you whatever you want—everything,'—Poppy, what would you say?"

"A doll, a wagon, and a little stow," said Poppy decidedly. "Do you know a fairy, Miss Jennings?"

"Perhaps I do, and perhaps I don't," said her teacher. "Now run away and tell your mother I'm going to the city, and probably won't be back till night."

She stooped down and kissed the little face again. "Wish me good luck, Poppy, dear."

It was like a dream, the walk to the station, the buying of her ticket, the people around her. She had the letter in her pocket, and read it again as the train whirled away across the level meadows.

"It reads all right," she thought, "but I dare not believe it. If it should be true, what shall I do with all that money? I won't make a spectacle of myself, as most people do that get rich suddenly. I'm sure of that. What shall I say to the lawyer? It's too absurd."

How she crossed the ferry and took the streetcar, Miss Jennings never knew, but she at last found herself at Mr. Mead's office. "I shall at least escape alive," was her unspoken thought, as she gave a tremulous ring to the bell. The door opened; she felt her cheeks burn. If only escape were possible!

"I want to see—is Mr. Mead in?" she stammered.

Then she had a confused sense of passing through a long room where there sat an indefinite number of young men busily writing with uncompromising pens on large sized paper. One or two raised their heads and looked at her as she went by.

Afterward she found herself in a smaller room with a hard and legal looking chair placed at her disposal. Here her conductor left her, saying that Mr. Mead would wait upon her in a few moments. Left to herself, Miss Jennings clutched

her precious letter, and sought to regain her composure. She was so far successful, that, when Mr. Mead appeared, she was able to confront him with tolerable calmness. Mr. Mead was tall, dignified and middle-aged.

"I got—I came—here's your letter," she began, growing more and more abashed and holding out the well-read document as she spoke. "I know it is all a mistake, and it's ridiculous my coming here, but it was Saturday, and I thought."

Mr. Mead had in the mean time looked over the letter.

"Then you are Miss Jennings?"

"Yes, sir—I know it can't be true, but—"

"But it is," said the lawyer, smiling—

"Do you mean to say that all that is mine?"

Mr. Mead made a gesture of assent.

"Mine!" and without further preliminaries Miss Jennings burst into tears.

The lawyer waited patiently till the last sob died away.

"I beg your pardon," she said at last, wiping her eyes at intervals, as she went on, "but I have supported myself for years, and it's been hard sometimes."

"I congratulate you on being freed from any such hardship in future," said Mr. Mead. "Few young ladies have such an estate in their own hands. The property is entirely unencumbered. I am ready to transfer all necessary papers to the hands of any lawyer you may choose."

"O, if you please," faltered Miss Jennings, "I don't want to choose any body. Would you mind very much seeing to it all for me yourself?"

Mr. Mead smiled. "I shall be very happy to do so. I had the honor of serving your late cousin for many years."

"That's settled then," and Miss Jennings's spirits rose, as she realized a little her new position—a young woman with a fortune and a lawyer. "Now I'll tell you a little about myself, and you'll tell me just what to do, won't you?"

Mr. Mead again signified his pleasure in serving her in any way.

"My father and mother died when I was twelve," she went on; "I had money enough to keep me at school till I was fifteen; since then I've taught, chiefly in district schools—the idea of my having that money—" breaking off abruptly—"I thought I was rich yesterday when the trustees offered me five hundred for next year. What will I do with all this?"

"You will wish to live in accordance with your new position," suggested Mr. Mead.

"Yes, I don't suppose I'll stay at Bayview," with a little smile, "but I don't know—I can't think to-day. May I write to you in a day or two? I want to go home now and think it all over."

"Write at any time you wish, Miss Jennings," said the lawyer.

"There are a few formalities to be attended to, as I have said, but if you should wish any money in the mean time—"

Miss Jennings interrupted him. "Do you mean that you could let me have some of my money now? It would make it seem so much more real if you could."

"Certainly, I shall be happy to be your banker. How much do you wish?" Mr. Mead unlocked a drawer as he spoke and took from it a roll of bills.

"I don't know—\$10 or \$20, perhaps."

Mr. Mead selected \$100 from the roll in his hand, and held it out to her, saying as he did so that she would probably not find that amount too large.

There was much less indistinctness about the long room as Miss Jennings passed out, attended by Mr. Mead himself. The young men resolved themselves into six; one of them near sighted, she noticed. The air was decidedly less stifling.

"How Poppy will stare!" she said to herself, as she entered a large toy store.

"Dolls, please,"—to the clerk who came forward to attend her. The young lady brought out a large box, and carelessly displayed its contents. "Here are some for 25 and some for 50 cents." Miss Jennings eyed them critically. Yesterday, they would have appeared good in her eyes; to-day they looked small and mean.

"Haven't you something better?" she asked, with a trifling asperity in her tone; "something for two or three dollars, perhaps."

The young person behind the counter grew perceptibly deferential.

"I beg your pardon, ma'am; I didn't know you wished anything so high-priced. Just step this way, please," and she passed down the store to a case where a choice assortment of imported dolls lay in state. Selecting from these a wax wonder with flaxen curls and movable blue eyes, she held it out to Miss Jennings for inspection.

"The little Poppy!" said the young lady, softly, as she signified her approval to the clerk. "You will believe in fairies after this won't you, dear?"

Mr. Mead, eldest son and heir to Mr. Mead, the lawyer, was already at N—, and under orders from his father to be of service, if possible, to Mrs. Brewster and her charge. It was in fulfillment of these orders that he approached Miss Jennings as she sat on the hotel plaza, an evening or two after her arrival, and begged leave to present his friend, Mr. Thornton. Miss Jennings assented, and the ceremony of introduction over, Mr. Mead withdrew.

"Yes, a stove and a little carriage."

These were soon produced, being marvels of their kind, and expensive enough to gratify Miss Jennings' desire for great expenditure. It was in a half-dream that she paid for them, and heard the clerk ask whether they should be sent.

"No, I'll take them," she said, adding mentally, "it would cost 25 cents, at least, for expressing them," and then she laughed as she realized that 25 cents was no longer a matter of importance to her.

It was late in the afternoon when she returned home, and Poppy was in the garden with her mother. Reaching her own room without observation, she untied her parcels and arranged the doll in the little carriage, placing the stove artistically in the background. This done, she opened the window that looked out upon the garden and called Mrs. Evans.

"Oh, you're back, are you?" said that person; then, in answer to her request for Poppy: "Yes, she's here. Poppy, teacher wants you. She'll come right over, Miss Jennings."

Going to the door, Miss Jennings caught Poppy in her arms, and covered the blue eyes with her hand.

"Now, Poppy," she said impressively, "what will you say if I tell you that I didn't see any fairy? Will you care?"

"Some," said Poppy, making a futile

little effort to free her eyes; "but mother says there ain't any."

"Your mother doesn't know anything about it," said her teacher, hastily. She felt much as if she had been in fairy land herself. "One! two! three! Look, Poppy!" and she sat the child lightly on the floor in front of the doll and uncovered her eyes.

The child's eyes widened and widened as she took in the wonders before her.

Suddenly she flung herself upon her teacher's lap and burst into tears. "Oh, I am afraid!" she sobbed out; "it's too pretty."

"Nonsense, Poppy," said Miss Jennings.

"Yes, sir—I know it can't be true, but—"

"But it is," said the lawyer, smiling—

"Do you mean to say that all that is mine?"

Mr. Mead made a gesture of assent.

"Mine!" and without further preliminaries Miss Jennings burst into tears.

The lawyer waited patiently till the last sob died away.

"I beg your pardon," she said at last, wiping her eyes at intervals, as she went on, "but I have supported myself for years, and it's been hard sometimes."

Thus encouraged, Poppy soon forgot her fear, and shrieked with delight over each new found charm—the shoes, the sash and the dear little fan.

"The land sakes, Poppy," said her mother, who came to the door, attracted by the child's excited tones. "What be you adoin' there?"

For all reply, Poppy held out the doll.

"Where upon earth—Miss Jennings, be you crazy?" as Poppy displayed, one by one, her treasures.

"I don't know, Mrs. Evans; I think I am a little."

"The idea of your getting all them things for that child. Why, you must have spent nigh a quarter's salary."

"I spent thirty-three dollars and seven cents," said Miss Jennings.

"They do, I assure you. I don't doubt the young woman in question has formed all her ideas of life from their pages. She'll expect every second man to be a Count, and every other woman to be a Duchess."

"I shouldn't think they'd find the oontract agreeable," said Miss Jennings.

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"I am afraid not," said Mr. Thornton.

"but my grandfather was once poor, very poor," he added, feeling that it might somehow give him an added value in her eyes.

Miss Jennings laughed.

"Why should you be afraid?" she asked. "All I meant was, that if you had, you could better appreciate my state of feeling now. Why, I used to teach for \$300 a year, Mr. Thornton."

"Thank heaven, you are freed from such drudgery now," he said, quickly.

"You mustn't call it drudgery," she said.

"Stop, Mrs. Evans, please," interrupted Miss Jennings; "it's all right. I got a letter from a lawyer this morning—the *Fire-side Companion*, or the *New York Weekly*. I always find them at the cottage where I stop on my hunting and fishing excursions. Those papers deal in such splendor and high life, they're acceptable by contrast."

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"but my grandfather was once poor, very poor," he added, feeling that it might somehow give him an added value in her eyes.

Miss Jennings laughed.

"Why should you be afraid?" she asked. "All I meant was, that if you had, you could better appreciate my state of feeling now. Why, I used to teach for \$300 a year, Mr. Thornton."

"Thank heaven, you are freed from such drudgery now," he said, quickly.

"You mustn't call it drudgery," she said.

"And then if there should have been a mistake, you won't have done anything."

Mr. Evans dutifully obeyed his wife's summons, and, amid many ejaculations from her little audience, Miss Jennings told her story.

"Just then an elderly lady appeared in the doorway, and looked toward them.

Miss Jennings rose, and, with a slight apology to the young man, immediately went to her.

"I trust the heiress will not disappoint you," was her parting remark.

Mr. Thornton's eyes followed approvingly. There was a certain grace of movement that pleased him.

"What a contrast she would make to you," he thought, as he walked away. "I wonder that Mead has said nothing about her."

Half an hour later he encountered his friend in one of the corridors.

"Where's your heiress?" queried Mr. Thornton, as they paused for a moment's talk.

"That is a question I might put to you with a better grace," announced Mr. Mead, "as I left you in her society an hour or so ago. It can't be that you've eloped with her already. Why, what's the matter, with you, man? You glower at me just what if you had seen a warlock!"

"Do you mean to say

PROFITS.

I built a chicken house, had it well thatched and fitted with lock and key, sir, then counted my chickens before they were hatched. Seven hundred just lacking but three, sir, I sold out the half at a fancy price. The rest I will keep for my own, sir—You see how my fortune is made in a trice, And made, too, by chickens alone, sir.

I counted my chickens when out of the shell, Five hundred and half dozen over! There's fifty five trios, when full grown, to sell, The others shall range in my clover. The eggs which they lay I will sell as I please, Or set them again at my pleasure; Were chickens but half as productive as these, The earning one's bread would be pleasure.

I counted my chickens when summer was gone, Just twenty and four was the number! Gave Mr. Rat what he feasted upon while I was enjoying my number! And look up the dozen thrown over the fence, Who died with the roup and the ral, sir, And tell, if you're able, the quarter from whence I'll seek my lost fortune to gain, sir.

—Colorado Farmer.

A Prospective Millionaire Editor.

Mr. Young E. Allison, managing editor of the *Louisville Commercial*, has always kept his princely accumulation of money in an old sock tucked under the bureau. But of late he has been studying the business habits of other wealthy men, and after a desperate struggle, has finally broken away from his old methods and opened a bank account. Yes, last week he started the officers of the Bank of Louisville by depositing, all in one pile, not less than \$7,63. Every day since that he has walked down to the bank to inquire if everything was all right, and has taken an excited interest in the laws relating to bank inspections and reports. Last Monday Mrs. Allison remarked that the last bottle of champagne had been served for dinner, and that if he would give her the money she would attend to the purchase of another case. "Not money, my dear; never let me hear you speak of money again. I have a bank account now, you know." Mrs. Allison, poor woman, didn't know what that meant and stood before her husband almost ready to cry. "You know, my dear, we men with bank accounts never give money; we give our—what is it we call 'em?—our, yes, our drafts on the back. I will write you a draft." In an hour Mrs. Allison sat at the bank and asked for the proprietor. "You mean the president? He is not in the city." "Well, that's funny that he should go away when our money is in here. Where's the other man?" The vice-president and cashier both happened to be out, but the paying teller politely asked if he could not transact the business. "I don't know," said Mrs. A., "maybe you can. Here is a note my husband sent down." The paying teller took the paper and read: "Bank of Louisville, dear sir, please pay Maggie \$3.80 and oblige her affectionate husband. Young E. Allison."

Ah Jim Wo's Treachery.

Mr. Mulcahey lives up-stairs in a Mott Street tenement. Ah Jim Wo has a laundry in the basement. Mr. Mulcahey, who is a sporting turn of mind, kept a red game bantam of warlike temperament confined in a three-cornered coop in the yard. Ah Jim Wo has a gigantic Shanghai, which he has been trying for a year to fatten for the table. Mr. Mulcahey has frequently expostulated with Ah Jim Wo because the Shanghai pecked at the bantam through the bars of the cage. Yesterday morning Mr. Mulcahey discovered the Shanghai with a grip upon his chick's tail feathers, trying to drag him through the bars. The chicken didn't come out, but the tail did.

Mr. Mulcahey was indignant. "Why don't you keep that beast of yours in the house?" he demanded.

"Looster likeo fighte your looster," exclaimed Ah Jim Wo.

"Then things don't fight," exclaimed Mr. Mulcahey in disdain.

Ah Jim regarded the game compassionately, and exclaimed: "Him too litde."

Mr. Mulcahey whispered hoarsely and impressively: "Have yeanny money, Mr. Wo?"

"Not got velly much."

"Can yo cover a five that yer long-legged devill stan' up till the game?"

"Allite. Come back click," said Ah Jim Wo, and he tucked his long-legged fowl under his arm and retired to the laundry to prepare for battle.

Mr. Mulcahey winked solemnly at Mr. Flaherty, who sat on the fence. Then he definitely fastened a pair of long steel gafts upon his chicken.

Ah Jim Wo reappeared with his cousin, Hop Gee, and several gentlemen from upstairs followed them into the yard. The Chinaman put his bird down, and Mr. Mulcahey threw the game at him. The game crowded, strutted up and walked around his big antagonist, looking for weak points. The Shanghai elevated himself upon his toes and looked down sideways at the pigmy. The game flew at the Shanghai, which dodged and tried to run, but the game headed him off. There was a flutter and flash, and the feathers flew from the Shanghai's breast, and then Mr. Mulcahey's chicken sneezed and lay down upon the ground to do it more conveniently.

"What ails the burrd?" shouted Mr. Mulcahey, and then he grasped a clothes pole for support, for the big one set one ponderous foot on the game's back and gave his neck a wrench, and the little bird expired.

"Be the powers," cried Mr. Mulcahey, "It's snuff the heathen sprinkled in his master's breast to strangle me poor burd."

"I'll not pay."

Ah Jim Wo picked up the dead fowl and said: "What you call 'em on loo's toe?" Ishman cheates Jim Wo.

"I'm beat entirely, Mr. Flaherty," said Mr. Mulcahey, dolefully. "Them Chines is full o' deceit!"—N. Y. Sun.

The Louisville Exposition awarded prizes on buggies and harness to the Elkhart Carriage and Harness Manufacturing Company, of Elkhart, Indiana. They deal directly with the consumer at wholesale prices, and ship any where with the privilege to examine before paying. See their advertisement in another column.

The Hot-Water Craze.

The irrigation of the human stomach by means of copious draughts of hot water has several pronounced advantages as a remedial agent. Hot water is cheap. It does not have to be shaken. If it is Schuykill water the patient will be particularly careful not to shake it. It need not be measured with the accuracy required in the taking of severer remedies. The ease with which water can be heated and heated water swallowed, when the knack has been fairly acquired, brings the remedy within the reach of the poor and the residents of regions remote from civilization and the corner drug store. But, as a matter of fact, it is among the wealthy, the high-livers, the frequenter of clubs that the hot-water craze takes, and it is they who take the hot water.

The *Medical News* calls this particular periodical sanitary epidemic "the hot-water mania," and traces its origin to Sangrado, the patron of Gil Blas, whose treatment consisted in bleeding and draughts of warm water. The *News* says the physical effect of hot water taken into the stomach is to wash out that organ and prepare it for better work, but it warns the owner of the abused organ that too much hot water injures instead of helps: that it should be taken before the process of digestion has begun, or after it is completed, and that the quantity and frequency of the dose should be gauged according to the conditions of the case. This will be news to the city hotels, where cups of hot water are distributed among the guests with the regularity of sunrise.

The hot-water craze will have its day, and in its turn will give place to some other cure, new or old. In the mean time it would be better to remove the condition which drives the owner of the overburdened stomach to seek relief in the hot water cups. The man who knows nothing of medicine and physiology, and yet undertakes to prescribe medicine for his complaints, outvies the lawyer who draws his own will and is said to have a fool for a client. There is danger even in doses of hot water, and, if an organ of the whole system is reduced until it requires a tonic, a physician is the most competent person to say what the tonic shall be.—*Philadelphia Press*.

The Elder Duck.

The elder duck (*Somateria mollissima*), in one of the most valuable birds of the northern regions, supplying, as it does, a most important article of commerce, and furnishing one of the chief means of support for the people. For these reasons the elder duck is zealously guarded and cherished by the inhabitants of Norway and all the northern islands; and in Iceland the killing of one of these birds or the secreting of an egg is rigorously punished by law. The elder duck, as is well known, robes her own breast of down with which to line her nest, and also reserves a supply of feathers as a covering for her eggs while she is away in pursuit of food. The down is thus easily secured by the owners of the islands, who do not hesitate to rob the nests to hatch, and those which are not consumed are pickled for winter use. The breeding places of the elder duck are private property, and are the source of a large income to their owners. The plan most frequently adopted is to remove both eggs and down, when the female lays another set of eggs and covers them with fresh down. These are again taken, and then the male is obliged to give his help by taking down from his own breast, and supplying the place of that which was stolen. The down of the male bird is pale-colored, and as soon as it is seen in the nest, the eggs and down are left untouched in order to keep up the breed.

In the male bird the top of the head is velvety black, and the cheeks are white. The ear-covers and back of the head is pale green. The back is white. The neck and upper parts of the breast are white, the lower parts of the neck pale buff, and the breast and abdomen black, relieved by a patch of white on the flanks. The bill and legs are green. The female is reddish brown, mottled with dark brown. The total length of the bird rather exceeds two feet.

A Healthy Village.

Since the first settlement of Fort Ross, Sonoma County, Cal, now over 30 years, with a population averaging from 50 to 100, there has never been a death in the place, according to the *San Francisco Journal*. The hotel is the old residence of the Russian commandante, built a generation before gold was first found in California; its floors are made of great redwood planks, six inches thick, and the great beams, groined rafters, and vast iron hinges, reaching clear across the door, give the place quite a dungeon-like appearance. The octagon block-houses, pierced for cannon, with the quaint old chapel, from which once a chime of bells summoned a strange people to their devotions, are tangible remembrances of a population, here now almost prehistoric.

These people selected a place of marvellous beauty and intrinsic merit, having a nice little harbor in which they built their ships in safety, and a bench of a thousand acres of fertile land, skirted by dense forests of redwood, rising from the valley to the height of 2000 feet, all watered by copious springs and rivulets, to make up its salient features. The old redwood stockade, which has been in the ground 70 years, is nearly as sound as when first made, and several logs have been taken from this place to England to show the durability of the wood. The other great merit of redwood is that it sprouts from the stump and thus renews itself; it is thought to be the only evergreen tree that has that quality. Where the Russians cut the redwoods 60 years ago the new trees that have sprouted from the stumps are about three feet in diameter.

Ayer's Cherry Pectoral possesses far-reaching and powerful healing qualities which its persistent use will demonstrate in any case of colds, coughs, throat and lung troubles, while its soothing and restorative effects are realized at once.

A Talk About Perfumes.

"How many flowers are used in the manufacture of perfumes?"

"The principal ones are roses, orange flowers, tuberoses, the jasmine, cassia and violet. Aside from the roses the flowery perfumes are produced in France, where farmers and gardeners devote themselves to the cultivation of flowers for the purpose. The pomades, which are a sort of vehicle for carrying the essences, are shipped to perfumers in all parts of the world. These pomades are all made in the same way. Several new processes have been devised, but none have proved as good as the old method. I may also say that perfumes are everywhere made from the raw material by the same process."

The perfumer took down another curious object from the shelf. It was an oxhorn with a cloth tied across the open end.

"This is the original in which civet is shipped from Egypt. Civet is an animal odor and is obtained from a pouch on an animal of that name, in which it is secreted. The best known of animal odors is musk, which is obtained from the musk deer. China furnishes the best quality. Twenty-five pods or sacks are packed in oblong boxes composed of plates of lead inclosed in a caddy made of pasteboard. The caddy is decorated with curious looking Chinese characters. Musk is obtained from Assam, Siberia, the Altai, London, the depot for all varieties of musk."

"What is ambergris?"

"That is another animal odor; it is secreted in the intestines of the spermatic whale. A very curious fact is that ambergris is only accumulated by disease—that is, it is only secreted in a sick whale. It is hard, of a light gray color, and is found in quantities varying from twenty to fifty pounds. It is worth thirty dollars an ounce. So you see if a party of sailors strike this kind of whale they make for shore. Spermatic whales are found near the island of Sumatra, Molucca, Madagascar and in the China seas."—*New-York West Trade*.

VARIETIES.

"OH, is the manager in?"

She stood at the window of the treasurer's office, and her mellifluous voice had a fever and ague tremor as she spoke.

"Yes," said the assistant treasurer, a demon smile lighting up his handsome features.

"What can I do for you?"

"Well, you know, I appeared last Tuesday evening in the play presented by the McGoorm Club. All my folks say I did very well."

"You did, indeed," replied the assistant treasurer, with the same polar air with which he refused to pass in reporter just little while before.

"That's what they all said. They said my death scene would have done credit to Rhea or Clara Morris."

"Oh, yes; you died very artistically; in fact, it is like a pin. His head prevents him from going too far."

"Who was the straightest man in the Bible?"

"Joseph." "Why?" "Because Pharaoh made a ruler of him."

"Are all on the ship of State made from the presidential canvas?" asks a young statesman from Brazil.

Adam never had to beat a carpet, says an exchange. "No, but he had to beat a retreat in the height of the fruit season."

Little Jack—"My mamma's new fan is hand-painted." Little Dick—"Pooh! who cares. Our whole fan is."

It is no more than proper that leap year should have one extra day, to give the girls all the time they need to propose in.

Fashionable young lady detaching her hair before retiring—"What dreams may come when we have shuffed off this mortal coil!"

Josh Billings dryly remarks that "of a man who a good wife he had better set perfectly aside, a good wife he had better set perfectly aside."

"Well, now, I'd like to have a place in your company. You know I would like to go on the stage. I think that would be my forte."

"Well, there isn't any place now in the company—that would be suited to your peculiar line of genius," said the assistant, heartlessly.

"Oh, my; I wouldn't be particular about the first year's salary," said she.

"Well, now, if I were you, I would be very particular about that—very particular."

"Why?" she answered in a surprised tone.

"Because, I hardly think you could get a second year's salary."

She swept out with an I-pur-pur-baseproposal sweep, and the assistant treasurer said:

"I've shattered another genius, but I have spared the public!"—and he invited the doorkeeper to join him in a smile.

As we go to press, facetiously remarked the young journalist, as he put his arms around her. "You don't make a good impression," she replied as she slapped his mouth.

From the Nursery.—Dude (posing for a bold, bad man): How does water taste, Miss Bell? Miss B.: You don't mean to say they have brought you up all this time on milk? Life."

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(Continued from first page)

are equally good. One of the cows weighs 1,700 lbs., and fills a pail as well as a butcher's eye. The pair of roadsters are well bred, well matched, and good travellers, for in company with Mr. Maring, John Cattell, and their owners, your reporter had the pleasure of riding behind them on a pleasant sunshiny day (one of the few of the year), to the stock farm of Elton Olney, in Leonidas. This farm comprises 200 acres of rolling land, being part of the old Indian reservation. The timber was oak and hickory, and as cleared is very productive, yielding last year 1,200 bushels of wheat from forty acres, and other crops in proportion. The house is a new frame one, which cost \$3,500, and the main barn is 40 by 60 feet, with 24 foot posts, and a double driveway. In the well arranged stable we see a pair of well bred six-year-old roadsters. The basement is full size, giving ample room for the stock to be winter stabled. Here we see the thoroughbred Shorthorn bull Prince of Barrington 48959, purchased from and bred by Wm. Ball, of Hamburg. He is red in color, was castrated September, 1881, got by Lord Barrington 3d 30115, out of Lotia by Twemlow 13060. Lotus by Muscaton 7057, a son of the imported Young Phyllis by Fairfax (1023). Mr. Olney is a quiet sheep breeder, having purchased in January, 1882, from E. Geddes, a ram of Shorthorn, Vt., 36 registered over 20 of which were from the estate of A. B. Treadway, 11 of the breeding of H. J. Delong & Son, and five of J. W. Knapp. The Treadway ewes were sired by T. Stickney & Sons' Woolly Head, and trace directly to the flock of J. T. & A. V. Rich. The Delong ewes were Robinson and Cutting stock, and were sired by Rip Van Winkle 45, Farnham's Bunker and Delong's 102. The Knapp ewes trace to Stickney, Atwood and Rich stock, and were sired by Stickney & Sons' rams. The ram at the head of this flock is J. T. Stickney 311, by Stickney 146, by Fremont Jr.; dam, a Stickney ewe. It is five years old, of large size and good constitution, and well capped and folded. The flock of 57 need no description, as their breeding should satisfy any one of their value. We also see here a large flock of pure bred Plymouth Rocks, of which, as well as bees, quite a specialty is made, both paying well.

Returning from this place we called on John Cattell who has 200 acres bordering on the river. Here we find one of the largest and most stylish frame farm houses that we have seen in the country; it was erected at a cost of over \$4,000, is 46 by 66 feet, finished in a complete style from cellar to garret, and so conveniently arranged as to be the pride of the family that occupy it and call it "home." From the top of the roof we obtain an uninterrupted view of a rich farming country for miles, of the most pleasing character.

The barn is 36 by 70 feet, with 18 feet posts, and 9 feet basement, making the best arranged one we have seen, as every part of it is utilized. The barn was built in 1872, and covers 200 feet by 36 feet and two bays 20 by 30 feet each. In the yard we find 160 high grade sheep, as their owners use none but registered rams, and by following out this plan of breeding, with careful and close attention, has raised its clip of wool to an average of 10 lbs., an example that hundreds of others might follow to their advantage. We find this flock to be in splendid condition, and as the owner of them tells us he feeds no grain, we realize what has often been told us, "that the breath of some is good for stock." We also notice a nice party of grade cattle, and some good horses in equally fine condition. The barn is nicely painted. The corn house is 20 by 30 feet, with a basement, in which are a bunch of good pigs. We also note the evergreens and young maples that will soon make a perfect shade, and add to the appearance of the surrounding.

Three and a half miles north of the village of Mendon is the farm of M. Olney & Son. The land was heavily timbered with beech, maple and oak, but has been cleared and placed under a good state of cultivation, and the owners are making in connection with their variety farming, a specialty of sheep, having commenced the breeding of thoroughbred ones in 1876. Their flock now numbers sixty. Their first purchase was five ewes and one ram from Bingham & Dean, two of them being Crane ewes and one Robinson. In 1881 they purchased from J. J. & A. N. McAllister 15 ewes and one ram lamb, afterwards known as M. Olney & Son 85, by Fremont 3d, by Fremont 2d, by Old Fremont, with a Robinson ewe by Old Fremont, and a lamb from a J. Q. Stickney for dam. In 1880 they purchased a half interest in Seindor 110, which was born in 1878. Brothers of Honeoye, N. Y. He was sired by Volunteer 108, dam by Bloomfield 69, granddam a Robinson ewe; Volunteer by Torrent 71, dam by Bloomfield 69, granddam a ewe bred by Robinson and sired by Tottington 31. On this flock have been used Sentinel 110 and rams of his own breeding, while those now in the flock were sired by Custer 61, bred by C. P. Crane, and tracing to Bismarck and Silver Horns, with dam by Birch Mountain. In the fall of 1883 they purchased Old Vermont, who was sired by Stickney 146, with a cutting ewe for dam. He is of good size and form, with quite a dense fleece of good staple, and clipped last year 28 lbs., while the whole flock averaged 13½ lbs. This flock is vigorous looking, have good size, rather plain in look, with plenty of constitution and well covered.

From this farm, in company with M. Olney, we rode to 350 acres of rich, level land, which is owned by David Olney, and which produces always large crops of wheat and corn. The house is large, the barns ample in size and convenient, one of them being 40x60 with 22 feet posts. In the yards we notice some grade cattle and young stock sired by Richard Doughtery's well-bred bulls, and one thoroughbred Shorthorn cow. There is a large party of grade sheep, and a Bunker ram from a Wetherell ewe that sheared 22 lbs. at Kalama last year.

Wm. R. Addison, of Leonidas, is the owner of the thoroughbred Holstein bull Duke of Lenawee 54. Of course he is black and white in color, was calved in July, 1879, was bred by B. A. Wright, of Toledo, O., got by Don Pedro 22 out of Starbuck 449, weighing 916 lbs., and is registered in V. A. & S. V. C. as the Leonidas Horn Book. He is a strong, vigorous, thrifty-looking animal, good head and horns, straight-backed, heavy-quartered, remarkably good back of fore-shoulder, a good hanlder, and has proved a good stock animal.

Although 'twas raining hard, we stopped and visited a few moments with Mr. John Kinney, who lives very pleasantly on a good farm just outside the village, and has been a subscriber to the FARMER ever so many years.

Charles Cattell has 380 acres of prairie land three miles out of Mendon, and is strictly a variety farmer. His largest barn is 38x70 feet, with posts 28 feet; his house is a frame one and finely situated. He has nearly 200 high grade sheep, the standard of which he has been aiming to raise for many years. He has received a good many orders for his clip, last year was a trifle over 11 pounds of washed wool. He believes it pays to use good registered rams. A good party of grade cattle were noticed, as well as a lot of sheep that were being fed for market.

Next week we shall finish up our notes on St. Joseph County, meanwhile keep "ON THE WING."

A CORRESPONDENT of the Western World says he injured his orchard of young apple trees by whipping the trunks with tarred paper to keep off mice, rabbits and borers, and as protection against sun scald.

Veterinary Department

Conducted by Prof. Robert Jennings, late of "Practiced," a division of "Horse and its Diseases," "Sheep, Pigs, and Poultry," "Horse Training Made Easy," etc. Professional advice through the columns of this journal to readers, and information will be required to send their full name and address to the office of the FARMER. No questions will be answered by the editor unless the questioner is a subscriber. The editor reserves the right to publish or withhold any information or correspondence which he deems appropriate.

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